

REMARKS/ARGUMENTS

Prior to this Amendment, claims 1-18 were pending in the application. New claims 19-23 are added to protect features of the invention not shown by the art of record.

Independent claim 1 is amended to clarify how the Figure of Merit is calculated, i.e., by adding a set of contributions that are each calculated by weighting outages in accordance with one of a plurality of relative weight values. Independent claim 12 is amended clarify what "weighting" of a contribution means in the claimed program product.

No new matter is added as support for this amendment and new claims is found at least in Figures 3 and 4B and in the specification at page 9, line 10 to page 11, line 16. Claims 1-23 remain for consideration by the Examiner.

Rejections Under 35 U.S.C. § 102

In the Office Action, claims 1-6 and 8-18 were rejected under 35 U.S.C. §102(b) as being anticipated by Barringer. This rejection is respectfully traversed based on the amendments to the claims and following remarks.

Initially, it should be noted that claimed invention is addressing methods and systems for providing "improved metrics...that account for customer perceived factors such as frequency of outage, duration of outages, business impact of outages" (see the specification at page 4, lines 1-2). As discussed in the Background of the specification, the improvement provided by the invention is over "conventional availability or reliability metrics" that "fail to account for business impact of failures."

It may be useful to initially discuss new independent claim 19, which includes several features not shown or suggested by Barringer. Claim 19 is directed to a method of monitoring a computer system that involves accessing log data for the computer system including data on occurrences of "a monitored event." A "set of computational weights for the monitored event" are determined and each of the weights is applicable to a range of values for the occurrence data. Then, the method involves "calculating a set of index contributions by applying each of the weights to the occurrence data" in a particular range. A figure of merit or index is then generated by combining the calculated index contributions. An example of this process is shown in Figure 4B and described in the related text in the specification. Weighting is achieved by applying a weight to the data in each range, and an

index or figure of merit is generated by adding each of the index contributions. Claim 19 is not anticipated or suggested by Barringer which fails to show each of these elements.

More particularly, Barringer fails to teach the concept of weighting as part of calculating the figure of merit. The Office Action with reference to claim 1 states that Barringer teaches the weighting concept because Barringer at the last paragraph of page 2, at the Abstract, and at pages 4-7 discusses values between 0 1 for the “associated indicia.” Further, the response to arguments section of the Office Action mentions an “availability ‘weighted factor’”. However, Barringer is teaching concepts that the claimed invention is improving upon, i.e., conventional reliability and availability concepts. Looking at page 2 of Barringer, an equation for “Effectiveness” is provided which teaches computing effectiveness by finding the product of four variables (i.e., availability, reliability, maintainability, and capability) that are each expressed as a probability. In other words, each of these variable will have a value “that lies between 0 and 1” and this results in the “Effectiveness” varying “from 0 to 1.” Barringer does not teach that any of these values are “weighted” prior to being used in the “Effectiveness” equation or that weighting is used to determine any of these probabilities. The fact that these 4 variables range from 0 to 1 does not mean they are weighted but instead is a byproduct of their being presented in the form of probabilities, which are by definition provided as a value of 0 to 1 or as a percentage. For further support of this description of Barringer, see Barringer at Figures 1 and 2 which plot probabilities but do not discuss weights (or business impact valuations for specific events). Hence, Barringer fails to teach “calculating a set of index contributions by applying each of the weights to the occurrence data,” and claim 19 is allowable over Barringer.

Additionally, Barringer also fails to teach determining a set of computation weights for a monitored event or that such weights apply to specific ranges of values of occurrence data. Barringer is cited at pages 4-7, but these pages discuss how availability and reliability are determined. No discussion is provide at this citation or elsewhere that weights should be used in the calculation of availability or reliability or applied to these two variables prior to their use in the Effectiveness equation shown on page 2. As mentioned above, Barringer teaches the calculation of availability and reliability as a percentage (or a value from 0 to 1) but not with computational weights. Further, Barringer does not teach combining calculated index contributions to generate the figure of merit because the availability, reliability, and

other variable of the Barringer Effectiveness equation are not index contributions (i.e., are not determined by applying weights to ranges of data collected from a computer system for a particular monitored event).

Dependent claim 20 depends from claim 19 and adds the limitation of “determining a difference between the figure of merit and a target index and reporting the difference.”

Assuming that Barringer’s Effectiveness is a figure of merit, Barringer does not teach comparing Effectiveness to a target Effectiveness and reporting this value. Claim 21 depends from claim 19 and requires that the weights differ in value which results in business impact valuation being reflected in the contribution of values in each measured occurrence range for the monitored event (for example, see Figure 4B). Barringer does not teach applying differing weights to each of the variables used in the Effectiveness equation or elsewhere. Claim 22 calls for the monitored event to be a server panic, a duration being the occurrence data, and ranges of values to be ranges of the panic duration. Barringer is discussing availability and reliability of manufacturing processes or plants and fails to provide any teaching of use of the Effectiveness equation in a computer system. Claim 23 calls for a management decision to be generated based on the reported difference, and Barringer fails to teach reporting a difference and cannot teach claim 23. Hence, claims 20-23 are believed allowable as depending on an allowable based claims and for these additional reasons.

The arguments provided for new claim 19 are applicable to amended claim 1. Additionally, claim 1 calls for the FOM to be calculated by “adding” contributions of each outage. If the Barringer Effectiveness is the FOM of claim 1, then Barringer fails to teach adding contributions of outages because it teaches on page 2 that Effectiveness is the product of availability, reliability, maintainability, and capability and not their sum. Further, claim 1 requires that the outage be weighted in accordance to one of a number of differing “relative weight values” that are selected based on an associated additional indicia. Barringer fails to teach the claimed weighting as discussed with reference to claim 19 (the use of probabilities with values between 0 and 1 by itself does not teach a mathematical weighting). Additionally, Barringer does not show “an additional indicia” being measured for each outage and then selecting a weight based on this additional indicia. Hence, claim 1 and claims 2-11 which depend from claim 1 are believed allowable over Barringer.

Likewise, claim 12 calls for “the calculation including multiplying the contributions

by a relative weight value corresponding to a particular one of the associated business impacts.” Barringer does not teach multiplying the availability, reliability, maintainability, and capability by any factors in the Effectiveness equation. Hence, the arguments for allowing claims 1 and 19 appear applicable to claim 12. Claim 12 and claims 13-14 that depend from claim 12 are believed allowable over Barringer.

Claim 15 requires that contributions for the event data be “weighted in accordance with the associated business impacts.” Hence, the reasons provided for allowing claims 1, 12, and 19 are applicable to claim 15. Specifically, Barringer fails to teach weighting as called for in claim 15. Claims 16-18 depend from claims 15 and are believed allowable as depending from an allowable base claim.

Rejections Under 35 U.S.C. § 103

In the Office Action, claim 7 was rejected under 35 U.S.C. §103 based on Barringer in view of Colby. Claim 7 depends from claim 1, which as discussed above is believed to be an allowable claim. Colby does not overcome the deficiencies of Barringer, i.e., provides no teaching of differing weighting of various contributions of an index or FOM, and therefore, claim 7 is believed allowable over the combination of Barringer and Colby.

Conclusions

The pending claims are believed to be allowable in light of these references considered alone or in any combination.

A check is provided for the fee associated with the added claims. However, any fee deficiency associated with this submittal may be charged to Deposit Account No. 50-1123.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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